

ABSTRACT OF THE DISCLOSURE

A fluid control device has very fine pores with an average diameter not greater than 10 nm and provides a large flux. The fluid control device comprises an
5 anodized alumina film having fine pores and a silicon based micro-porous film having very fine pores and made from an AlSi mixed film and the fine pores and the very fine pores are at least partly linked with each other. The fluid control device is prepared from a film
10 including at least an aluminum layer and an AlSi mixed film by forming an anodized alumina film having fine pores by way of an anodization process for the aluminum layer part and also forming a silicon based micro-porous film having very fine pores containing silicon
15 as principal ingredient by way of an anodization process or etching process for the AlSi mixed film. The fluid control device can be used as filter or ultrafilter film that allows fluid and gas to pass through it.